

Issuance Date: March 27, 2002

Effective Date: May 1, 2002
Expiration Date: June 30, 2007

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM WASTE DISCHARGE PERMIT

State of Washington DEPARTMENT OF ECOLOGY Olympia, Washington 98504-8711

In compliance with the provisions of
The State of Washington Water Pollution Control Law
Chapter 90.48 Revised Code of Washington
and
The Federal Water Pollution Control Act
(The Clean Water Act)
Title 33 United States Code, Section 1251 et seq.

Rustlewood Mason County Department of Utilities and Waste Management Mason County Courthouse Shelton, WA 98584

Plant Location: East Rustle Way Receiving Water: Pickering Passage

approximately 10 miles northeast of Shelton

Water Body I.D. No.: WA-14-0010 <u>Discharge Location</u>:

<u>Plant Type</u>: Extended Aeration Latitude: 47° 16′ 55″ N

Longitude: 122° 55′ 30″ W

is authorized to discharge in accordance with the special and general conditions which follow.

Kelly Susewind, P.E.
Southwest Region Supervisor
Water Quality Programs

Washington State Department of Ecology

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SUMMARY OF SUBMITTALS

Permit Section	Submittal	Frequency	First Submittal Date
S3.A.	Discharge Monitoring Report	Monthly	15th day of the
			month following the
			completed
			Reporting Period
S4.D	Infiltration and Inflow Evaluation Report	Annual	May 1, 2002
S4.E.	Annual Assessment of Flow and Waste	Annual	May 1, 2002
	Load		
S5.B.	O & M Manual	When Changes are	As Needed
		Made	
S8.	Outfall Evaluation	1/permit cycle	January 1, 2005
G17.	Application for permit renewal	1/permit cycle	January 1, 2005

S1. EFFLUENT LIMITATIONS

A. Beginning on the effective date of this permit and lasting through the expiration date, the Permittee is authorized to discharge subject to meeting the following limitations:

EFFLUENT LIMITATIONS**

<u>Parameter</u>	Monthly Average	Weekly Average	
Biochemical Oxygen Demand* (5 day)	30 mg/L, 13.8 lbs/day	45 mg/L, 20.7 lbs/day	
Total Suspended Solids*	30 mg/L 13.8 lbs/day	45 mg/L, 20.7 lbs/day	
Fecal Coliform Bacteria	200/100 ml	400/100 ml	
рН	shall not be outside the range 6.0 to 9.0		
Chlorine	Total available (residual) chlorine shall be minimized. Residual chlorine shall not exceed the amount required to achieve the fecal coliform limits specified.		

^{*}The monthly average effluent concentration limitations for BOD₅ and Total Suspended Solids shall not exceed 30 mg/l or 15 percent of the respective influent concentrations, whichever is more stringent.

B. DILUTION ZONE DESCRIPTION

The boundaries of the dilution zone are defined as follows:

The limits in depth of the dilution zone shall be one foot below the surface to one foot above the bottom.

The length of the dilution zone with respect to the centerline of the diffuser shall be 150 feet plus the depth of the water above the diffuser at MLLW.

The width of the dilution zone shall be the length of the diffuser plus 100 feet plus the depth of the water above the diffuser.

^{**}The monthly and weekly averages for BOD₅ and Total Suspended Solids are based on the arithmetic mean of the samples taken. The averages for fecal coliform are based on the geometric mean of the samples taken.

S2. TESTING SCHEDULE

The Permittee shall monitor the wastewater and sludge according to the following schedule:

TEST	SAMPLE POINT	FREQUENCY	SAMPLE TYPE ¹
Flow, mgd	Influent or Final Effluent	Continuous	On line
pН	Influent	5/week	Grab
	Final effluent	5/week	Grab
BOD ₅	Influent	Weekly	24-hr. composite
	Final effluent	Weekly	24-hr. composite
TSS	Influent	Weekly	24-hr. composite
	Final effluent	Weekly	24-hr. composite
Chlorine Residual	Final effluent	Daily (7/wk)	Grab
Chlorine Usage	Final effluent	Daily (7/wk)	Report
Fecal Coliform	Final effluent	Weekly	Grab
	(sampled concu	rrently with a chlorine res	sidual sample)
Dissolved Oxygen	Final effluent	5/week	Grab
Ammonia	Final effluent	weekly ²	Grab
Metals: Cd, Cu, Pb, Zn	Final effluent	Annually	24-hour composite
Metals: Cd, Cu, Pb, Zn	"partially stabilized"	Annually	Grab
	sludge		
Sludge Volume or	"partially stabilized"	Approximately	Grab
Weight		monthly ³	

¹Influent and effluent sampling shall be performed in accordance with procedures described in the approved operations and maintenance manual for this facility.

²For the months of July, August and September during second year of permit only.

³Sludge volume or weight is taken when wasting from the sludge treatment and handling operation.

S3. MONITORING AND REPORTING

The Permittee shall monitor the operations and efficiency of all treatment and control facilities and the quantity and quality of the waste discharged. A record of all such data shall be maintained. The Permittee shall monitor the parameters as specified in Condition S1. of this permit.

A. Reporting

Monitoring results obtained during the previous month shall be summarized and reported on a form provided, or otherwise approved, by Ecology, to be submitted no later than the 15th day of the month following the completed reporting period. The report shall be sent to the Department of Ecology, Southwest Regional Office, P.O. Box 47775, Olympia, Washington 98504-7775. Monitoring shall be started on the effective date of the permit and the first report is due on the 15th day of the following month.

Reporting - Shellfish Protection

Unauthorized discharges, including (but not limited to) collection system overflows, plant bypasses, or failure of the disinfection system, shall be reported immediately. For purposes of this section, the reporting requirement shall consist of both:

- 1. Notification to the following organizations:
 - a. Ecology (see General Condition G4), Southwest Regional Office, Water Quality Inspector at (360) 407-6278 or at the 24-hour Emergency Spill Response Number (360) 407-6300; and
 - b. Department of Health, Shellfish Program, at (360) 753-5992.
- 2. Notification to the public:
 - a. Posting of notices of treatment plant upset in areas of public access.
 - b. Notification of local news media (television, radio or daily newspapers) for public service announcements.

B. Records Retention

The Permittee shall retain for a minimum of three years all records of monitoring activities and results, including all reports of recordings from continuous monitoring instrumentation. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by the Director. The Permittee shall retain for a minimum of five (5) years all records pertaining to the monitoring of sludge.

C. Recording of Results

For each measurement or sample taken, the Permittee shall record the following information: (1) the date, exact place and time of sampling; (2) the dates the analyses were performed; (3) who performed the analyses; (4) the analytical techniques or methods used; and (5) the results of all analyses.

D. Representative Sampling

Samples and measurements taken to meet the requirements of this condition shall be representative of the volume and nature of the monitored discharge, including representative sampling of any unusual discharge or discharge condition, including bypasses, upsets, and maintenance-related conditions affecting effluent quality.

E. Test Procedures

All sampling and analytical methods used to meet the monitoring requirements specified in this permit shall, unless approved otherwise in writing by Ecology, conform to the <u>Guidelines Establishing Test Procedures for the Analysis of Pollutants</u>, contained in 40 CFR Part 136.

S4. PREVENTION OF FACILITY OVERLOADING

A. Design Criteria

Flows or waste loadings of the following design criteria for the permitted treatment facility shall not be exceeded.

Average flow for the maximum month: 55,000 gpd. Influent BOD₅ loading for maximum month: 111 lbs/day Influent TSS loading for maximum month: 111 lbs/day Design population equivalent: 556

B. Notification of New or Altered Sources

The Permittee shall submit written notice to Ecology whenever any new discharge or increase in volume or change in character of an existing discharge into the sewer is proposed which: (1) would interfere with the operation of, or exceed the design capacity of, any portion of the collection or treatment system; (2) would increase the total system flow or influent waste loading by more than 10 percent; (3) is not part of an approved general sewer plan or approved plans and specifications; or would be subject to pretreatment standards under 40 CFR Part 403 and Section 307(b) of the Clean Water Act. This notice shall include an evaluation of the system's ability to adequately transport and treat the added flow and/or wasteload.

C. Infiltration and Inflow Evaluation and Reduction

The Permittee shall submit an annual report to Ecology summarizing any measurable infiltration and inflow, the reduction in I/I compared to previous years, and the amount of resources committed to this program.

The report shall be submitted by May 1, 2002, and annually thereafter.

D. Annual Assessment

The Permittee shall conduct an annual assessment of their flow and waste load and submit a report to Ecology by May 1, 2002, and annually thereafter. The report shall contain the following: an indication of compliance or noncompliance with the permit effluent limitations; a comparison between the existing and design monthly average dry weather and wet weather flows, peak flows, BOD, and total suspended solids loadings; and (except for the first report) the percentage increase in these parameters since the last annual report. The report shall also state the present and design population or population equivalent, projected population growth rate, and the estimated date upon which the design capacity is projected to be reached, according to the most restrictive of the parameters above. The requirement for annual review and reporting may be waived by Ecology if the reports do not indicate a need for review at that frequency.

S5. OPERATION AND MAINTENANCE OF MUNICIPAL FACILITIES

A. <u>Certified Operator</u>

In accordance with Chapter 173-230 WAC, the Permittee shall provide an adequate operating staff which is qualified to carry out the operation, maintenance, and testing activities required to ensure compliance with the conditions of this permit. An operator certified for a Class II plant by the State of Washington shall be in responsible charge of the day-to-day operation of the wastewater treatment plant. A Class I operator shall be present at the facility during all shifts when operational changes are made to the treatment process.

B. O & M Manual

If changes are made to the approved O&M Manual, then the Permittee shall submit to Ecology for approval, the updated sections of the operation and maintenance manual for the sewerage system. An approved operation and maintenance manual shall be kept available at the treatment plant. All operators are responsible for being familiar with, and using, this manual.

C. O & M Program

The Permittee shall institute an adequate operation and maintenance program for their entire sewage system. Maintenance records shall be maintained on all major electrical and mechanical components of the treatment plant, as well as the sewage system and pumping stations. Such records shall clearly specify the frequency and type of maintenance recommended by the manufacturer and shall show the frequency and type of maintenance

performed. These maintenance records shall be available for inspection at all times.

D. Short-Term Reduction

If a Permittee contemplates a reduction in the level of treatment that would cause an exceedance of permit effluent limitations on a short-term basis for any reason, and such reduction cannot be avoided, the Permittee shall give written notification to Ecology, if possible, 30 days prior to such activities, detailing the reasons for, length of time of and the potential effects of the reduced level of treatment. If such a reduction involves a bypass, the requirements of Conditions G5. and S6. will apply.

E. Electrical Power Failure

The Permittee is responsible for maintaining adequate safeguards to prevent the discharge of untreated wastes or wastes not treated in accordance with the requirements of this permit during electrical power failure at the treatment plant and/or sewage lift stations either by means of alternate power sources, standby generator, or retention of inadequately treated wastes.

F. <u>Prevent Connection of Inflow</u>

The Permittee shall strictly enforce their sewer ordinances and not allow the connection of inflow (roof drains, foundation drains, etc.) to the sanitary sewer system.

S6. CONSTRUCTION OR MAINTENANCE-RELATED OVERFLOW OR BYPASS

Bypasses of untreated or partially treated sewage during construction or maintenance shall be avoided if at all feasible.

If a construction or maintenance-related overflow or bypass is contemplated, the Permittee shall submit to Ecology, not less than 90 days prior to the contemplated overflow or bypass, a report which describes in detail any construction work which will result in overflow or bypass of wastewater. The report shall contain: (1) an analysis of all known alternatives which would eliminate, reduce, or mitigate the need for bypassing; (2) a cost-effective analysis of alternatives including comparative resource damage assessment; (3) the minimum and maximum duration of bypass under each alternative; (4) a recommendation as to the preferred alternative for conducting the bypass; (5) the project date of bypass initiation; (6) a statement of compliance with SEPA; and (7) a request for a water quality modification, as provided for in WAC 173-201-100(2).

For probable construction bypasses, the need to bypass is to be identified as early in the planning process as possible. The analysis required above shall be considered during preparation of the engineering report or facilities plan and plans and specifications and shall be included to the extent practical. In cases where the probable need to bypass is determined early, continued analysis is necessary up to and including the construction period in an effort to minimize or eliminate the bypass.

Final authorization to bypass may be granted after review of the above information, in accordance with General Condition G5. Authorization to bypass will be by administrative order.

S7. PRETREATMENT

- A. Commercial and industrial operations shall not be allowed to discharge wastes to the Permittee's sewerage system until they have received prior authorization from Ecology in accordance with Chapter 90.48 RCW and Chapter 173-216 WAC, as amended.
- B. General Prohibitions In accordance with 40 CFR 403.5(a), non-domestic discharges which would pass through the treatment works or interfere with their operation or performance, shall not be discharged into the sewerage system.
- C. Specific Prohibitions In accordance with 40 CFR 403.5(b), the following non-domestic discharges shall <u>not</u> be discharged into the system.
 - 1. Pollutants that create a fire or explosion hazard.
 - 2. Pollutants that will cause corrosive damage to Publicly Owned Treatment Works (POTWs); specifically, discharges with pH values less than 5.0 standard units.
 - 3. Solid or viscous pollutants in amounts that could cause obstruction in sewers or otherwise interfere with the operation of the POTW.
 - 4. Slug discharges, in terms of volume, strength, or other measure, of such magnitude as to cause treatment process upsets and subsequent loss of treatment efficiency.
 - 5. Heat in amounts that will inhibit biological activity at the POTW; specifically, discharges that cause the temperature of the POTW influent to exceed 40°C (104°F).

S8. OUTFALL EVALUATION

The Permittee shall conduct an underwater survey of the discharge pipe and bottom conditions in the area of the designated dilution zone. The purpose of this survey is to 1) determine the exact location of the outfall; 2) ascertain the physical condition of the submerged outfall pipe and diffusers, and; 3) evaluate apparent impacts of the discharge on sediment and marine organisms in the vicinity of the dilution zone. If conditions allow for a photographic verification, it shall be included in the report.

An outfall evaluation shall be conducted and a report submitted to Ecology with the application for permit renewal.

The Permittee may be required to conduct additional monitoring of the sediment if observations indicate the discharge is unacceptably impacting sediments of the receiving waters.

GENERAL CONDITIONS

G1. Discharge Violations

All discharges and activities authorized by this permit shall be consistent with the terms and conditions of this permit. The discharge of any pollutant more frequently than, or at a concentration in excess of, that authorized by this permit shall constitute a violation of the terms and conditions of this permit.

G2. <u>Proper Operation and Maintenance</u>

The Permittee shall at all times properly operate and maintain all facilities and systems of collection, treatment, and control (and related appurtenances) which are installed or used by the Permittee for pollution control.

G3. Reduced Production for Compliance

The Permittee, in order to maintain compliance with its permit, shall control production and/or all discharges upon reduction, loss, failure, or bypass of the treatment facility until the facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost, or fails.

G4. <u>Non-compliance Notification</u>

If for any reason, the Permittee does not comply with, or will be unable to comply with, any of the discharge limitations or other conditions specified in the permit, the Permittee shall, at a minimum, provide the Department of Ecology (Ecology) with the following information:

- A. A description of the nature and cause of non-compliance, including the quantity and quality of any unauthorized waste discharges;
- B. The period of non-compliance, including exact dates and times and/or the anticipated time when the Permittee will return to compliance; and
- C. The steps taken, or to be taken, to reduce, eliminate, and prevent recurrence of the non-compliance.

In addition, the Permittee shall take immediate action to stop, contain, and clean up any unauthorized discharges and take all reasonable steps to minimize any adverse impacts to waters of the state and correct the problem. The Permittee shall notify Ecology by telephone so that an investigation can be made to evaluate any resulting impacts and the corrective actions taken to determine if additional action should be taken.

In the case of any discharge subject to any applicable toxic pollutant effluent standard under Section 307(a) of the Clean Water Act, or which could constitute a threat to human health, welfare, or the environment, 40 CFR Part 122 requires that the information specified in Sections G4.A., G4.B., and

G4.C., above, shall be provided not later than 24 hours from the time the Permittee becomes aware of the circumstances. If this information is provided orally, a written submission covering these points shall be provided within five days of the time the Permittee becomes aware of the circumstances, unless Ecology waives or extends this requirement on a case-by-case basis.

Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the conditions of this permit or the resulting liability for failure to comply.

G5. Bypass Prohibited

The intentional bypass of wastes from all or any portion of a treatment works is prohibited unless the following four conditions are met:

- A. Bypass is: (1) unavoidable to prevent loss of life, personal injury, or severe property damage; or (2) necessary to perform construction or maintenance-related activities essential to meet the requirements of the Clean Water Act and authorized by administrative order;
- B. There are no feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, maintenance during normal periods of equipment down time, or temporary reduction or termination of production;
- C. The Permittee submits notice of an unanticipated bypass to Ecology in accordance with Condition G4. Where the Permittee knows or should have known in advance of the need for a bypass, this prior notification shall be submitted for approval to Ecology, if possible, at least 30 days before the date of bypass (or longer if specified in the special conditions);
- D. The bypass is allowed under conditions determined to be necessary by Ecology to minimize any adverse effects. The public shall be notified and given an opportunity to comment on bypass incidents of significant duration, to the extent feasible.

"Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

After consideration of the factors above and the adverse effects of the proposed bypass, Ecology will approve or deny the request. Approval of a request to bypass will be by administrative order under RCW 90.48.120.

G6. Right of Entry

The Permittee shall allow an authorized representative of Ecology, upon the presentation of credentials and such other documents as may be required by law:

A. To enter upon the premises where a discharge is located or where any records must be kept under the terms and conditions of this permit;

- B. To have access to and copy at reasonable times any records that must be kept under the terms of the permit;
- C. To inspect at reasonable times any monitoring equipment or method of monitoring required in the permit;
- D. To inspect at reasonable times any collection, treatment, pollution management, or discharge facilities; and
- E. To sample at reasonable times any discharge of pollutants.

G7. Permit Modifications

The Permittee shall submit a new application or supplement to the previous application where facility expansions, production increases, or process modifications will (1) result in new or substantially increased discharges of pollutants or a change in the nature of the discharge of pollutants, or (2) violate the terms and conditions of this permit.

G8. Permit Modified or Revoked

After notice and opportunity for public hearing, this permit may be modified, terminated, or revoked during its term for cause as follows:

- A. Violation of any terms or conditions of the permit;
- B. Failure of the Permittee to disclose fully all relevant facts or misrepresentations of any relevant facts by the Permittee during the permit issuance process;
- C. A change in any condition that requires either a temporary or a permanent reduction or elimination of any discharge controlled by the permit;
- D. Information indicating that the permitted discharge poses a threat to human health or welfare;
- E. A change in ownership or control of the source; or
- F. Other causes listed in 40 CFR 122.62 and 122.63.

Permit modification, revocation and reissuance, or termination may be initiated by Ecology or requested by any interested person.

G9. Reporting a Cause for Modification

A Permittee who knows or has reason to believe that any activity has occurred or will occur which would constitute cause for modification or revocation and reissuance under Condition G8. or 40 CFR 122.62 must report such plans, or such information, to Ecology so that a decision can be made on whether action to modify or revoke and reissue a permit will be required. Ecology may then

require submission of a new application. Submission of such application does not relieve the Permittee of the duty to comply with the existing permit until it is modified or reissued.

G10. Toxic Pollutants

If any applicable toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Clean Water Act for a toxic pollutant and that standard or prohibition is more stringent than any limitation upon such pollutant in the permit, Ecology shall institute proceedings to modify or revoke and reissue the permit to conform to the new toxic effluent standard or prohibition.

G11. Plan Review Required

Prior to constructing or modifying any wastewater control facilities, detailed plans shall be submitted to Ecology for approval in accordance with Chapter 173-240 WAC. Facilities shall be constructed and operated in accordance with the approved plan.

G12. Other Requirements of 40 CFR

All other requirements of 40 CFR 122.41 and 122.42 are incorporated in this permit by reference.

G13. Compliance With Other Laws and Statutes

Nothing in the permit shall be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

G14. Additional Monitoring

Ecology may establish specific monitoring requirements in addition to those contained in this permit by administrative order or permit modification.

G15. Revocation for Non-Payment of Fees

Ecology may revoke this permit if the permit fees established under Chapter 173-224 WAC are not paid.

G16. Removed Substances

Collected screening, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall not be resuspended or reintroduced to the final effluent stream for discharge to state waters.

G17. Duty to Reapply

The Permittee must reapply, for permit renewal, at least 180 days prior to the specified expiration date of this permit.